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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/822,847	KIM, YOUNG-KOOK	
	Examiner	Art Unit	
	PHENUEL S. SALOMON	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 May 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4,7,9,19-24,27-29 and 31-64* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 7, 9,19-24,27-29,and 31-64* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the request for continued examination filed on June 11, 2008. Claims 27, 35, 48 and 63 have been amended; claims 5-6, 8, 10-18, 25-26, and 30 have been cancelled; claims 1-4, 7, 9, 19-24, 27-29, and 31-64 are pending.

2. The rejections of claims 27-34 under 35 U.S.C. 102(e) as being anticipated by Bald et al. (US 6,744,259) have been withdrawn pursuant to applicant amendment.

3. The rejections of claim 64 under 35 U.S.C. 102(e) as being anticipated by Yu (US 6,757,034) have been withdrawn pursuant to applicant argument.

4. The rejections of Claims 1-4 under 35 U.S.C. 103(a) as being unpatentable over Bald (US 6,744259 B2) in view of Badger (US 5,973,664) have been withdrawn pursuant to applicant argument.

5. The rejections of Claims 7 and 9 are rejected 35 U.S.C. 103(a) as being unpatentable over Badger (US 5,973,664) in view of Bald (US 6,744,259 B2) have been withdrawn pursuant to applicant argument.

6. The rejections of Claims 19-23, and 35-36 under 35 U.S.C. 103(a) as being unpatentable over Bald (US 6,744,259) in view of Badger (US 5,973,664) have been withdrawn pursuant to applicant argument.

7. The rejections of Claim 24 under 35 U.S.C. 103(a) as being unpatentable over Bald (US 6,744,259) in view of Badger (US 5,973,664) and in further view of Ruberry et al.(US 6,356,287 B1) have been withdrawn pursuant to applicant argument.

8. The rejections of Claims 37-62 under 35 U.S.C. 103(a) as being unpatentable over Yu (US 6,757,034 B2) in view of Kim (US 6,346,972 B1) have been withdrawn pursuant to applicant argument and amendments.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (US 6,757,034) in view of Badger (US 5,973,664).

Claim 1: Yu discloses a method of indicating functions of buttons in an image display apparatus, the method comprising:

generating an image indicating functions assigned to the buttons (fig. 3, items 101-102); and

displaying the image on the image display apparatus, wherein the image is displayed at a position on the image display apparatus close to the buttons (fig. 3, items 302), and wherein the displaying of the image on the image display apparatus further comprises: but does not explicitly disclose

detecting a pivot angle of the image display apparatus, and

displaying the image rotated according to the pivot angle.

However, Badger discloses a sensor, which determines the current physical orientation and signal the operating system to change the orientation mode to compensate for the rotation (col. 5, lines 26-31). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include pivot angle detection in Yu. One would have been motivated to do so in order to accommodate the user with different orientation modes and providing the right image display for each alternative mode.

11. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (US 6,757,034) in view of Badger (US 5,973,664) and in further view of Bald (US 6,744,259 B2).

Claim 2: Yu and Badger disclose a method as in claim 1 above, Yu further discloses the image but does not explicitly disclose text indicating the functions assigned to the buttons. However Bald discloses image with text indicating the functions (fig. 1, item 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include text indicating functions in Yu. One would have been motivated to do so in order to accommodate the user with both image and text description of the function.

Claim 3: Yu, Badger and Bald disclose the method as in claim 2 above, Bald further discloses the language of the text can be selected by a user (col. 5, lines 36-44), [language could have been one of the options, since it is a technical equipment which can be used worldwide]. One would have been motivated to do so in order to accommodate the user in term of universality of the apparatus.

Claim 4: Yu, Badger and Bald disclose a method as in claim 2 above, Yu further discloses the image also includes symbols indicating at least one function assigned to at least one respective button (fig. 3, item 302).

12. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,346,972 B1) in view of Bald (US 6,744,259 B2).

Claim 7: Kim discloses an image display apparatus comprising:

an image display unit (fig. 1);

a graphics processing unit (panel driver) which supplies images displayed by the image display unit (fig. 3, item 900),

a pivot detector which detects a pivot angle of the image display apparatus and supplies pivot angle data to the graphics processing unit (fig. 3, item 800);

the graphics processing unit displays the image rotated according to the pivot angle (fig. 10), but does not explicitly disclose:

a controller which sets display parameters of the image display apparatus, has buttons for item selection, and performs operations assigned to the buttons; and

wherein:

the image display unit has zones to display an image indicating functions assigned to the buttons, and the controller generates image information to be displayed in the zones and supplies the image information to the graphics processing unit.

the zones to display an image, indicating functions assigned the buttons are displayed at a position on the image display apparatus close to the buttons, and

However, Bald discloses

a controller which sets display parameters of the image display apparatus, has buttons for item selection, and performs operations assigned to the buttons (*display screen controller that checks parameters associated with softkeys and displays functions assigned to the keys*) (col. 5, lines 46-62),

the image display unit has zones to display an image indicating functions assigned to the buttons, and the controller generates image information to be displayed in the zones and supplies the image information to the graphics processing unit and (fig. 1, items 1-4), (col. 5, lines 36-44)

the zones to display an image, indicating functions assigned the buttons are displayed at a position on the image display apparatus close to the buttons (fig. 1, items 1-4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have included Bald's features in Kim. One would have been motivated to do so in order to accommodate the user with a wide variety of menu selections and providing the right image display for each alternative mode.

Claim 9: Kim and Bald disclose an apparatus as in claim 7 above, Bald further discloses the image indicating functions assigned the buttons is text indicating the functions assigned to the buttons (fig. 1, items 1-4). One would have been motivated to do so in order to accommodate the user with both image and text description of the function.

13. Claims 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bald (US 6,744,259) in view of Kim (US 6,346,972 B1).

Claim 19: Bald discloses an image display apparatus having buttons to select items of a display, comprising:

an image display unit including zones to display an image indicating functions assigned to the buttons; (fig. 1, items 1-4)

a controller to set display parameters of the image display apparatus, to perform operations assigned to the buttons (col. 5, lines 46-62), to generate image information to be displayed in the zones (fig. 1, items 1-4) and to supply the image information to the graphics processing unit, (col. 5, lines 36-44), but does not explicitly disclose:

a graphics processing unit to supply images displayed by the image display unit;

a pivot detector to detect a pivot angle of the image display unit and to provide the pivot angle detected to the graphics processing unit such that the graphics processing unit supplies an image to the image display unit at a same pivot angle as the image display unit

However, Kim discloses

a graphics processing unit to supply images displayed by the image display unit (fig. 3);

a pivot detector to detect a pivot angle of the image display unit and to provide the pivot angle detected to the graphics processing unit such that the graphics processing unit supplies an image to the image display unit at a same pivot angle as the image display unit (col. 5, lines 8-11 and fig. 3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include graphics processing in Bald. One would have been motivated to do so in order to speed up the display process and provide the user with the right image display for each alternative mode.

Claim 20: Bald and Kim disclose the image display apparatus as in claim 19 above, Bald further discloses the zones are in a close corresponding relationship with the respective button (fig. 3, item 3).

Claim 21: Bald and Kim disclose the image display apparatus as in claim 19 above, Bald further discloses the functions can be displayed in several different languages (*use of a scrolling display permits selection from among a greater number of options than there are softkeys*) (col. 5, lines 36-44) [language could have been one of the options, since it is a technical equipment which can be used worldwide].

Claim 22: Bald and Kim disclose the image display apparatus as in claim 19 above, Bald further discloses comprising:

a button discrimination unit the discriminate which button is pushed (col. 5, lines 46-50

Claim 23: Bald and Kim disclose the image display apparatus as in claim 19 above, Bald further discloses the image is displayed when any one of the buttons is pushed (col. 5, lines 51-62).

14. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bald (US 6,744,259) in view of Kim (US 6,346,972 B1) and in further view of Ruberry et al.(US 6,356,287 B1).

Claim 24: Bald and Kim disclose the image display apparatus as in claim 19 above, but do not explicitly disclose a second set of buttons, wherein when the image display unit is pivoted, the zones become in close corresponding relationship with the second set of buttons. However, Ruberry discloses a new orientation setting where the device repaints the displayed text using the new orientation (col. 12, lines 37-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include this feature in Bald. One would have been motivated to do so in order to help the user by taking advantage of all the buttons functionality even in a rotated position.

15. Claims 27-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bald et al. (US 6,744,259) in view of Yu (US 6,757,034 B2).

Claim 27: Bald discloses a method of indicating functions of buttons in an image display apparatus having a screen and a frame with the buttons, the method comprising:

generating one of first functions of a first button and one of second functions of a second button to be displayed on the screen (*at power up the system displays menu where a plurality of functions can be selected)* (col. 5, lines 36-42);

wherein the generating the one of the first functions comprises simultaneously generating each set of the first and second functions according to activation (*scrolling*) of one of the first and second buttons (*use of a scrolling display permits selection from among a greater number of options than they are softkeys*) (col. 5, lines 43-45); but does not explicitly disclose

generating sub-functions of at least one of the first and second buttons according to the generated first and second function. However, Yu discloses a OSD software to display menu functions and sub functions respective to indicative symbols and buttons (fig. 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include Yu sub-functions feature in Bald. One would have been motivated to do so in order to optimize screen real estate.

Claim 28: Bald and Yu disclose the method as in claim 27 above, Bald further discloses each of the first functions and the second functions comprises one or more characters (as shown in fig. 3), and the generating of the first functions comprises displaying the characters in a direction in which the first and second buttons are arranged on the frame (*menu displays cursor control activated by softkeys 1 and 2 and select keys by softkey 3 and exit by softkey 4*) (col. 5, lines 36-44).

Claim 29: Bald and Yu disclose discloses the method as in claim 27 above, Bald further discloses each of the first functions and the second functions comprises one or more characters (as shown in fig. 3), and the generating of the one of the first functions comprises displaying the characters in a direction having an angle (the keys and related functions form a zero degree angle) with an arrangement of the first and second buttons (*menu displays cursor control activated by softkeys 1 and 2 and select keys by softkey 3*

and exit by softkey 4) (col. 5, lines 36-44).

Claim 31: Bald and Yu disclose the method as in claim 27 above, Bald further discloses the generating of the one of the first functions comprises displaying the one of the first functions and the one of the second functions on corresponding zones of the screen (fig. 3) and (col. 5, lines 36-44).

Claim 32: Bald and Yu disclose the method as in claim 27 above, Bald further discloses comprising: changing one of the first functions to another function corresponding to the first button to be displayed on the screen (*the menu permits user to select among four types of test function*) (col. 5, lines 42-44).

Claim 33: Bald and Yu disclose the method as in claim 27 above, Bald further discloses at least one of the first functions and the second functions is programmable (col. 4, lines 27-33).

Claim 34: Bald and Yu disclose the method as in claim 27 above, Bald further discloses the first functions and the second functions comprises at least one of menu, select, +, -, symbols. Arrow-up bold. or , a format of a signal source, and one of languages (fig. 1, items 1-4).

16. Claims 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bald (US 6,744,259) in view of Yu (US 6,757,034 B2) in further view of Kim (US 6,346,972 B1).

Claim 35: Bald discloses an image display apparatus having a screen and a frame with at least one button, comprising:

a controller to set display parameters of the image display apparatus, to perform operations assigned to the buttons (col. 5, lines 46-62), to generate image information to be displayed in the zones

(fig. 1, items 1-4) and to supply the image information to the graphics processing unit, (col. 5, lines 36-44), but does not explicitly disclose:

a graphics processing unit to process at least one function of the respective at least one button to be displayed on the screen at a position corresponding to the at least one button;

a pivot detector to detect a pivot angle of the image display unit and to provide the pivot angle detected to the graphics processing unit such that the graphics processing unit supplies an image to the image display unit at a same pivot angle as the image display unit

However, Yu discloses

a graphics processing unit to process at least one function of the respective at least one button to be displayed on the screen at a position corresponding to the at least one button (fig. 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include graphics processing in Bald. One would have been motivated to do so in order to speed up the display process and provide the user with the right image display function at the right position.

However, Kim discloses:

a pivot detector to detect a pivot angle of the image display unit and to provide the pivot angle detected to the graphics processing unit such that the graphics processing unit supplies an image to the image display unit at a same pivot angle as the image display unit (col. 5, lines 8-11 and fig. 3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include graphics processing in Bald. One would have been motivated to do so in order to speed up the display process and provide the user with the right image display for each alternative mode.

Claim 36: Bald Kim and Yu discloses the image display apparatus as in claim 35 above, Yu further discloses the at least one function of the respective at least one button comprises first and second sub-functions, and the generating of the first and second sub-functions comprises selectively generating one of

first and second sub-functions according to activation of the respective button (*an OSD software to display menu functions and sub functions respective to indicative symbols and buttons*) (fig. 3). One would have been motivated to do so in order to optimize screen real estate.

17. Claims 37-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (US 6,757,034 B2) in view of Pivot Pro Software (copyright 1998-2001) (hereinafter **Pivot Pro**) and in further view of Kim (US 6,346,972 B1)).

Claim 37: Yu discloses a device for displaying an image, comprising:

a screen (fig. 3);

a housing having an opening and an outer border surface substantially surrounding the opening, wherein the screen is positioned inside the housing so as to be viewable through the opening (fig. 3);

at least one input unit being positioned on the housing, wherein the actuation of the at least one input unit allows controlling of a function of the display device (fig. 3, item 102); but does not explicitly disclose

a detector unit to detect whether the device is in a portrait mode or in a landscape mode,

wherein at least one symbol is displayed which is respectively assigned to the at least one input unit, and wherein the orientation of the at least one symbol is changed in accordance with the result of the detector unit.

However, Pivot Pro discloses:

a detector unit to detect whether the device is in a portrait mode or in a landscape mode (p. 1, para. [001]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include detector unit in Yu. One would have been motivated to do so in order to help the user by taking advantage of all the buttons functionality even in a rotated position.

However, Kim discloses:

wherein at least one symbol is displayed which is respectively assigned to the at least one input unit, and wherein the orientation of the at least one symbol is changed in accordance with the result of the detector unit (col. 7, lines 51-55) and (fig. 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include Kim feature in Yu. One would have been motivated to do so in order to help the user by taking advantage of all the buttons functionality even in a rotated position.

Claim 38: Yu Pivot Pro and Kim disclose the device according to claim 37 above, Kim further discloses the detector unit detects the portrait mode or the landscape mode in response to a user rotating the screen (fig. 10).

Claim 39: Yu Pivot Pro and Kim disclose the device according to claim 37 above, Yu further discloses the at least one symbol comprises at least one icon or text indicating a function of the display device (fig. 3).

Claim 40: Yu Pivot Pro and Kim disclose the device according to claim 39 above, Yu further discloses the at least one symbol is configured to be displayed on the screen in a location that establishes a visually corresponding relationship between the at least one symbol and the at least one input unit (col. 3, lines 18-21).

Claim 41: Yu Pivot Pro and Kim disclose the device according to claim 40 above, Yu further discloses the function includes a function to control display parameters of the display device (col. 3, lines 48-50).

Claim 42: Yu Pivot Pro and Kim disclose the device according to claim 37 above, Yu further discloses, wherein the function includes a function to control display parameters of the display device (fig. 4, items 103 & 301).

Claim 43: Yu Pivot Pro and Kim disclose the device according to claim 37 above, Kim further discloses the at least one input unit further comprises at least one of group comprising a set of horizontally arranged input keys (fig. 1) and Yu further discloses a set of vertically arranged input keys (fig. 3). One would have been motivated to do so in order to better manage the screen real estate.

Claim 44: Yu Pivot Pro and Kim disclose the device according to claim 37 above, Kim further discloses the at least one symbol is configured to be displayed horizontally and in an upright direction to indicate a respective position and function of the at least one input unit regardless of the portrait or the landscape mode of the display device (fig. 10). One would have been motivated to do so in order to make it easier for the user to adjust the display parameter.

Claim 45: Yu Pivot Pro and Kim disclose the device according to claim 37 above, Yu further discloses the at least one symbol further comprises an OSD menu having selectable items to adjust the display parameters of the screen, and wherein the OSD menu is configured to be displayed distant from the at least one image (col. 2, lines 11-18).

Claim 46: Yu Pivot Pro and Kim disclose the device according to claim 37 above, Yu further discloses the at least one input unit is a button (fig. 3).

Claim 47: Yu Pivot Pro and Kim disclose the device according to claim 37 above, Yu further discloses the at least one input unit is positioned on the outer border surface which is substantially flush with the screen (fig. 5, items 22).

Claim 48: Yu discloses a method of controlling a display device having at least one of input unit positioned on a housing of the display device, the method comprising:

displaying at least one symbol on a screen, the symbol indicative of a function to control the display device, the at least one symbol being assigned to the at least one input unit (fig. 3); but does not explicitly discloses

detecting a rotated state of the display device;

changing an orientation of the at least one symbol according to the detection of the rotated state of the display device; and

controlling the function of the display device upon actuation of the at least one input unit. However, Pivot Pro discloses:

detecting a rotated state of the display device (p. 1, para. [001]);

changing an orientation of the at least one symbol according to the detection of the rotated state of the display device (p. 1, para. [001]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include detector unit in Yu. One would have been motivated to do so in order to help the user by taking advantage of all the buttons functionality even in a rotated position.

However, Kim discloses:

controlling the function of the display device upon actuation of the at least one input unit (col.6, lines 10-15). Therefore, it would have been obvious to one having ordinary skill in the art at the time the

invention was made to include Kim feature in Yu. One would have been motivated to do so in order to help the user by taking advantage of all the buttons functionality even in a rotated position.

Claim 49: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Yu further discloses the symbol is a text (fig. 3, item 303).

Claim 50: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Yu further discloses the symbol is an icon (fig. 3, items 302).

Claim 51: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Kim further discloses the determining of the rotated state of the display device determines the rotated state of the display device in response to a user rotating the screen of the display device (col. 6, lines 11-15).

Claim 52: Yu Pivot Pro and Kim disclose the method as claimed in claim 51 above, Kim further discloses the rotated state is either a portrait or a landscape viewing state (fig. 10).

Claim 53: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Yu further discloses the function includes at least one function to control a display parameter of the display device (fig. 4, items 103 and 301).

Claim 54: Yu Pivot Pro and Kim disclose the method as claimed in claim 53 above, Yu further discloses the function includes one of contrast, brightness, and color control (fig. 4, item 301).

Claim 55: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Yu further discloses the at least one symbol visually corresponds to at least one input unit(fig. 4, item 302).

Claim 56: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Yu further discloses the at least one input unit is a button (fig. 3, item 102).

Claim 57: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Yu further discloses the at least one input unit is positioned on the display device to be flush with the screen (fig. 5, item 22).

Claim 58: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Yu further discloses the at least one input unit includes a plurality of input units (fig. 4, items 103 and 301).

Claim 59: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Yu further discloses the at least one input units are buttons (fig. 4, item 103).

Claim 60: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Kim and Yu further disclose the at least one input units includes a plurality of input units disposed in one of a vertical direction and a horizontal direction (fig. 10 and 3) respectively.

Claim 61: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Kim further discloses the changing of the orientation of the at least one symbol comprises rotating the symbol substantially 90 degrees (fig. 10).

Claim 62: Yu Pivot Pro and Kim disclose the method as claimed in claim 48 above, Kim further discloses the respective assignment of the displayed at least one symbol to the at least one input unit remains the same even though the at least one symbol is rotated (col. 7, lines 51-61).

Claim 63: Yu discloses a method of controlling a display device having at least one of input unit positioned on a housing of the display device, the method comprising:

displaying at least one symbol on a screen, the symbol indicative of a function to control the display device, the at least one symbol being assigned to the at least one input unit (fig. 3); but does not explicitly disclose

changing an orientation of the at least one symbol in accordance with a detection of a viewing state of the screen, in which the viewing state relates to a rotated state of the screen; and

controlling the function of the display device upon actuation of the at least one input unit. However, Pivot Pro discloses

changing an orientation of the at least one symbol in accordance with an information indicative of a viewing state of the screen, in which the viewing state relates to a rotated state of the screen (p. 1, para. [001]). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include detector unit in Yu. One would have been motivated to do so in order to help the user by taking advantage of all the buttons functionality even in a rotated position.

However, Kim discloses

controlling the function of the display device upon actuation of the at least one input unit (col. 7, lines 58-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include Kim feature in Yu. One would have been motivated to do so in order to help the user by taking advantage of all the buttons functionality even in a rotated position.

18. Claim 64 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yu (US 6,757,034) in view of Bald et al. (US 6,744,259).

Claim 64: Yu discloses a method of controlling a display device having at least one of input unit positioned on a housing of the display device, the method comprising:

displaying at least one symbol on a screen, the at least one symbol indicative of a function to control the display device, the at least one symbol being assigned to the at least one input unit (fig. 3); and

controlling the function of the display device upon actuation of the at least one input unit (col. 3, lines 18-25), wherein the at least one symbol visually corresponds to at least one input unit (fig. 3, item 103), the at least one input unit is disposed near the at least one symbol (fig. 3, item 303), but does not explicitly disclose the at least one input unit is disposed so as to be substantially flush with the surface of the screen. However, Bald discloses input buttons that are substantially flush with the unit surface (fig. 1, items 1-4). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include Bald feature in Yu. One would have been motivated to do so in order to accommodate the user with different function buttons.

Response to Arguments

19. Applicant's arguments filed on 06/11/2008 have been fully considered but they are not moot in view of new ground of rejection (s).

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Barrus et al. (US 7,002,604 B1) discloses screen rotation.

b. Tang et al. (US 6,765,577 B1) discloses apparatus and method for rotating on-screen display fonts.

c. Kimura (US 7,167,729 B1) discloses portable electronic apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phenuel S. Salomon whose telephone number is (571) 270-1699. The examiner can normally be reached on Mon-Fri 7:00 A.M. to 4:00 P.M.(Alternate Friday Off) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272 4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

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PSS
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/Joshua D Campbell/
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